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Broad-band amplification began with this stage. The anode circuit load (Anodenbelastung) consisted of an inductively coupled band filter. The band-width of this over-critical coupled band filter was about 10 mc. As the next stage used pentodes, the necessary damping of the band filter was produced with inductiveless resistances. The coupling of the band filter could be regulated externally.

b. Power stage:

This stage used two LS-50 pentodes in push-pull circuit. The antenna system was a broad band dipole (with half wavelength feeds), inductively coupled to the final circuit of the final stage. Likewise, damped rejector circuits were coupled to the anode circuit. These both served to shift the left edge of the pass-band (Durchlassbereich). In this way it was possible to achieve the necessary slope of the response curve (Durchlasskurve).

- 5. Further notes on the transmitter:
 - a. The detector:

 This was capacitively coupled to the inductively coupled antenna circuit. The detector served as an output indicator (antenna current), for picture control, as a monitor and as a degree of modulation control. This was achieved by display of the demodulated carrier on a cathode ray tube. The zero line on the cathode ray tube screen was generated by a polarized relay (fed by 50 kc AC).
 - b. Modulation was three-stage; the re-leading in of the continuous voltage component took place in the last stage.
 - c. Grid biasing voltage: By regulation of the grid biasing voltage of the final stage of the modulator it was possible to adjust the grid biasing voltage of the whole modulated stage; this was done by conductive coupling of the modulator output to the grid of the modulated stage.
 - d. The mains set: The mains set for the two pre-stages of the modulator was simply stabilized and the anode voltage was stabilized by electron tubes. Internal resistance was about 10 ohms.
 - e. The constancy of the control voltage on the grid of the modulated stage during the modulation period was achieved by loose coupling.
 - f. The antenna: The usual broad-band dipole with director, reflector, and half wave-length feeds was used for the antenna.
 - g. Range of the transmitter: This transmitter could radiate over a distance of about 10 kms. It was set up for working between NII-380 and Fontanka experimental works.

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